

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521310

Luminaire Tested: **SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521310
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

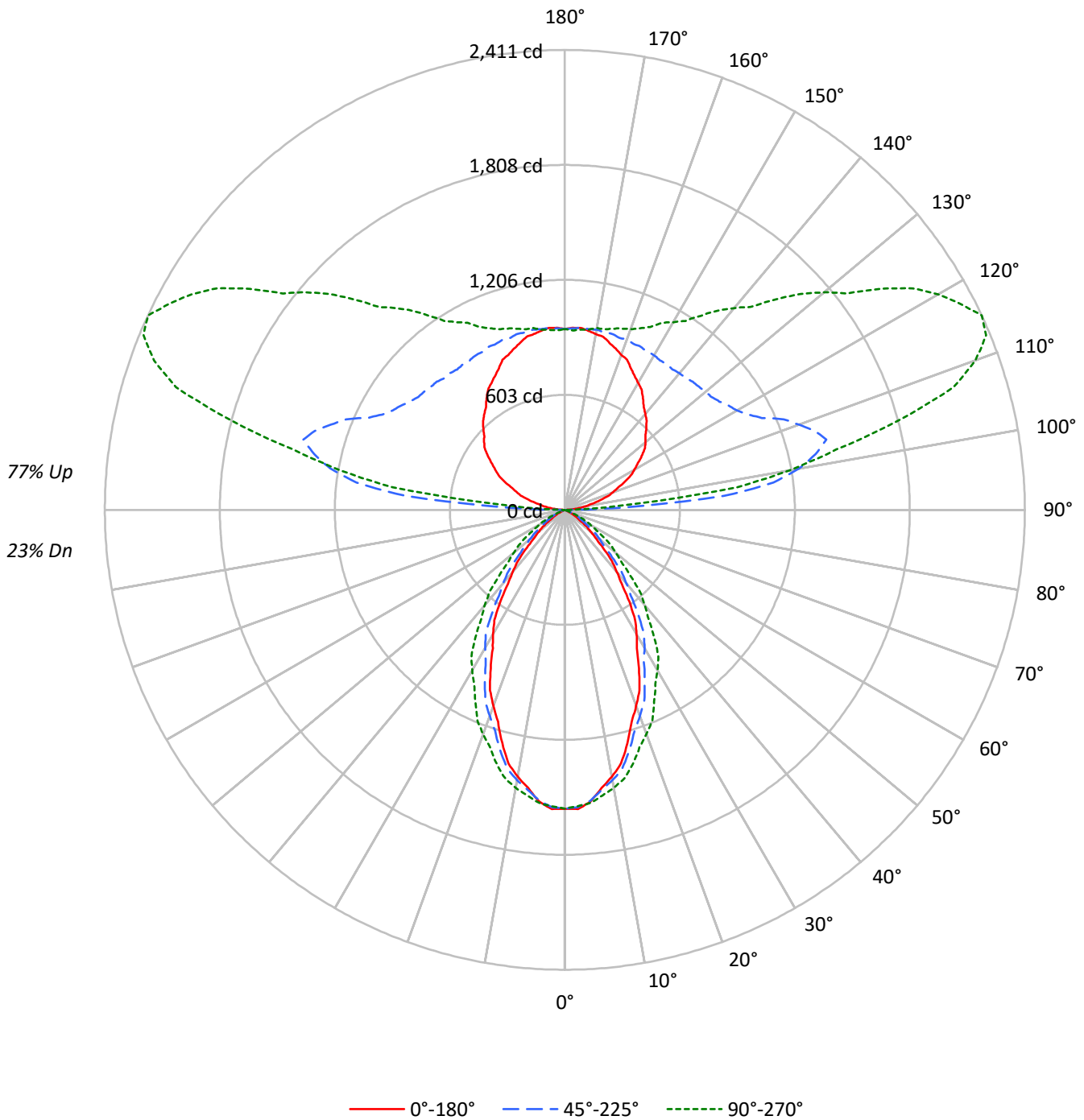
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8005.2 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 82.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23
1	93	89	85	82	82	79	76	74	61	59	58	44	43	43	29	29	28	21
2	85	78	73	69	75	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	22	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	29	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	12	10
10	46	35	28	24	41	32	26	22	25	21	18	20	17	15	14	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14454	14454	14454
5°	14222	14187	14291
10°	13307	13484	13861
15°	12097	12481	13176
20°	10738	11296	12286
25°	9351	10092	11289
30°	8010	8890	10343
35°	6642	7546	9202
40°	5103	6034	7842
45°	3689	4569	6310
50°	2513	3405	5004
55°	1634	2463	3889
60°	937	1735	2810
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	1.8
10°-20°	365.6	4.6
20°-30°	457.7	5.7
30°-40°	422.8	5.3
40°-50°	284.1	3.5
50°-60°	146.7	1.8
60°-70°	46.0	0.6
70°-80°	2.9	0.0
80°-90°	0.1	0.0
90°-100°	488.5	6.1
100°-110°	1180.8	14.7
110°-120°	1259.3	15.7
120°-130°	1020.0	12.7
130°-140°	789.7	9.9
140°-150°	602.4	7.5
150°-160°	436.1	5.4
160°-170°	268.6	3.4
170°-180°	90.9	1.1
0°-30°	966.3	12.1
0°-40°	1389.1	17.4
0°-60°	1820.0	22.7
0°-90°	1868.9	23.3
90°-120°	2928.6	36.6
90°-150°	5340.7	66.7
90°-180°	6136.0	76.7
0°-180°	8005.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1520	1532	1537	1543	142
15°	1266	1262	1307	1350	1379	353
25°	919	926	991	1059	1109	421
35°	590	604	670	749	817	365
45°	283	300	350	418	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	48	244	837	544	381	54
105°	189	326	1419	1836	1813	199
115°	345	441	1140	2162	2411	341
125°	492	566	990	1719	2019	439
135°	604	675	949	1356	1560	466
145°	715	768	931	1152	1242	447
155°	819	854	943	1020	1058	378
165°	905	919	956	970	984	255
175°	958	954	958	949	947	90
180°	947	947	947	947	947	

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CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1570.3	1555.5	1559.4	1559.3	1555.1
5°	1535.6	1520.0	1531.8	1537.2	1543.1
7.5°	1470.7	1458.5	1481.1	1498.1	1510.4
10°	1420.4	1410.0	1439.3	1462.4	1479.5
12.5°	1362.2	1354.1	1389.6	1421.3	1443.1
15°	1266.5	1262.1	1306.7	1350.5	1379.4
17.5°	1164.0	1163.9	1214.8	1269.3	1304.1
20°	1093.7	1095.9	1150.5	1210.6	1251.3
22.5°	1023.4	1028.5	1086.9	1149.5	1196.2
25°	918.6	926.0	991.4	1059.2	1108.9
27.5°	818.0	828.8	897.5	968.0	1028.5
30°	751.9	764.5	834.5	908.7	970.9
32.5°	687.0	702.0	770.2	848.7	912.1
35°	589.7	604.5	670.0	748.9	817.0
37.5°	489.2	503.7	567.7	645.3	719.0
40°	423.7	440.0	501.0	576.2	651.1
42.5°	364.3	380.6	437.9	511.8	582.5
45°	282.7	299.8	350.2	418.3	483.6
47.5°	215.1	233.6	277.9	339.5	399.0
50°	175.1	193.6	237.2	291.6	348.6
52.5°	142.9	160.9	200.2	251.5	303.8
55°	101.6	118.6	153.1	196.6	241.8
57.5°	70.2	84.9	115.8	152.1	187.5
60°	50.8	64.9	94.0	123.4	152.3
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.7	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.1	132.2	311.5	151.4	102.8
95°	48.2	244.4	837.0	544.3	381.4
97.5°	85.5	270.8	1102.4	1062.0	911.7
100°	114.4	287.1	1248.5	1318.0	1194.3
102.5°	141.7	301.9	1344.9	1531.1	1457.7
105°	188.7	326.1	1419.1	1836.1	1812.6
107.5°	234.9	354.6	1375.4	2080.8	2136.1
110°	267.0	378.8	1304.7	2186.3	2290.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.1	403.1	1242.1	2212.0	2389.9
115°	345.3	441.4	1140.1	2161.5	2410.7
117.5°	391.0	481.7	1080.3	2045.2	2337.3
120°	421.5	505.9	1041.8	1954.0	2260.2
122.5°	453.6	531.8	1017.7	1860.8	2162.2
125°	491.8	566.4	989.6	1719.0	2019.3
127.5°	529.5	599.8	969.9	1599.0	1862.7
130°	552.0	620.7	963.5	1515.4	1774.4
132.5°	572.9	644.7	953.9	1455.0	1674.9
135°	604.2	674.8	949.4	1355.5	1559.6
137.5°	633.9	704.9	935.4	1288.2	1442.0
140°	656.4	721.1	935.4	1239.7	1381.0
142.5°	678.9	743.6	927.4	1197.4	1316.8
145°	714.6	767.6	931.4	1152.2	1242.5
147.5°	747.9	799.3	929.0	1100.1	1174.7
150°	768.8	813.9	935.4	1077.2	1136.1
152.5°	791.3	834.8	933.8	1053.0	1105.6
155°	819.0	854.3	943.4	1020.5	1057.8
157.5°	852.3	882.5	941.4	1008.1	1030.1
160°	865.1	890.6	949.4	991.9	1007.7
162.5°	886.0	908.4	946.2	987.0	996.4
165°	905.3	919.0	955.5	969.8	983.6
167.5°	929.0	938.0	953.1	968.7	969.1
170°	935.4	941.3	959.5	957.7	967.5
172.5°	946.6	950.9	954.7	958.9	953.1
175°	957.5	953.5	957.5	949.4	947.4
177.5°	955.5	955.5	952.2	948.9	941.0
180°	947.4	947.4	947.4	947.4	947.4

(END OF REPORT)